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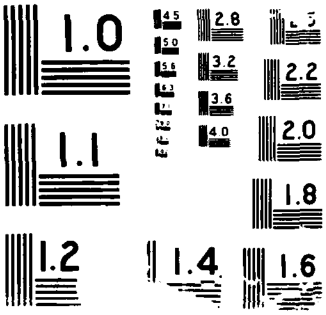
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STUDENT REPORT

A PRACTICAL GUIDE FOR MANAGING CUSTOMER SERVICE IN BASE CIVIL ENGINEERING

MAJOR ROBERT E. LUEBBEN 88-1635

"insights into tomorrow"

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Submitted to the faculty in partial fulfillment of
requirements for graduation.

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This handbook was prepared to provide Base Civil Engineering managers a practical guide for managing customer service. The handbook defines the concept of customer service and and documents the need for improved quality of customer service within civil engineering. The handbook describes the characteristics of quality customer service and appropriately categorizes them into service strategy, service system, and service people. The handbook presents a five step method for evaluating customer service in Base Civil Engineering. Sample interview, questionaire, and analytical techniques are provided. Although the handbook is designed primarily for Base Civil Engineering managers, the concepts are general enough to be applied to any Air Force organization.

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PREFACE

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Major Robert E. Luebben is a professional Industrial Engineer possessing base level and higher headquarters experience in a wide variety of civil engineering functions. He graduated with a Bachelor of Science degree in Civil Engineering from the University of Missouri in 1975. One year later, he received a Master of Science degree in Industrial Engineering from the same school. He attended Officer's Training School and received his Air Force commission in 1976. He has served as an Industrial Engineer at Offutt AFB, Nebraska, Osan AB, Republic of Korea, and McChord AFB, Washington. In 1983, he was selected to direct the Industrial Engineering Management Applications and the Real Property Management Courses at the Air Force Institute of Technology at Wright-Patterson AFB, Ohio. In 1986, he attained the academic rank of Assistant Professor of Engineering Management. In addition, he has conducted numerous seminars and workshops and provided professional organizational development consulting services to special operating agencies worldwide. Major Luebben has completed Squadron Officers School and Air Command and Staff College.

TABLE OF CONTENTS

Preface iii
About the Author. iv

CHAPTER ONE -- INTRODUCTION . . . .
  Customer Service Defined. 1
  The Need for Improved Customer Service. 2

CHAPTER TWO -- CHARACTERISTICS OF QUALITY CUSTOMER SERVICE. .
  The Service Strategy. 5
  The Service System. 7
  The Service People. 8
  An Applied Example. 9

CHAPTER THREE -- A METHOD FOR EVALUATING AND IMPROVING CUSTOMER SERVICE IN BASE CIVIL ENGINEERING .
  Step One: Evaluate Present Service Quality. 11
  Step Two: Develop and Clarify a Service Strategy. 13
  Step Three: Educate the Organization. 15
  Step Four: Implement the New Tactics. 16
  Step Five: Reward Changes 19
  Conclusion. 20

BIBLIOGRAPHY. 21

APPENDICES. . . . .
  Appendix A -- Example Customer Interview Questions. 24
  Appendix B -- Example Customer Service Questionaire 25
  Appendix C -- Suggested Analytical Techniques for Small Group Facilitators. 27

CHAPTER ONE

INTRODUCTION

Top quality customer service is vitally important to base civil engineering organizations. In a predominantly service oriented organization such as base civil engineering, top quality customer service contributes to higher levels of organizational effectiveness and greatly improves image and credibility. This paper seeks to describe the concept of customer service within the civil engineering community and offer practical guidelines for managers to use in evaluating and improving the organization's quality of customer service.

This chapter defines the concept of customer service and documents the need for improved quality of customer service within civil engineering. Chapter Two describes the characteristics of quality customer service and appropriately categorizes them into service strategy, service system, and service people. Chapter Three presents a five step plan for evaluating and improving customer service in base civil engineering. The appendix provides sample interview and questionaire questions and suggested analytical techniques.

Customer Service Defined

It is important for all civil engineering personnel to have a clear concept of customer service. Base civil engineering customers include, but are not limited to, those who call or drop in at the customer service unit. The concept of customer service must be expanded to include performance of service for all personnel who live or work on base. Likewise, when civil engineers speak of customer service management, it must encompass more than the customer service unit personnel. It must be broad enough to include all base civil engineering workers.

In a typical base civil engineering organization, there are hundreds of opportunities for civil engineering customer interactions. A well known management consultant, Karl Albrecht, refers to these points of contact as "moments of truth". He goes on to say, "they form the basis of the customer's impressions of that organization" (1:27). In many organizations, the vast majority of these moments of truth go completely unmanaged. The image then of that organization is formed on a daily basis in places all over the base by members of that organization who may or may not know what the customer wants or how to provide it. In the worst case scenario, the member may know what the customer wants and how to provide it, but simply does not want to.

Managing these moments of truth is the challenge. In order to organize a framework for managing these moments of truth, the author has researched the writings of several prominent experts on the subject of customer service. With special credit to Albrecht for the majority of the underlying theory, he has taken their ideas and combined them with his personal experience as an Air Force industrial engineer, educator and manager and organized them into a series of steps.

Although this framework is designed primarily for base civil engineering managers, the concepts are general enough to be applied to any Air Force organization.

The Need for Improved Customer Service

The contribution that top quality customer service has on the Air Force mission is best described by First Lieutenant Theresa Carter, an industrial engineer working at Tinker AFB, Oklahoma. While conducting a civil engineering customer service study, she stated the following:

> "To fly and fight, that is the mission of the Air Force. It is a challenging mission, one that requires the cooperation of operational and support forces. While support functions often are only noticed when something goes wrong, the Air Force could not be successful without their efforts. Of the support organizations, the one which impacts the living and working conditions of every Air Force member, military and civilian, more than any other unit, is Civil Engineering.
>
> Civil Engineering is tasked with providing for the maintenance and repair of all real property facilities and utilities on base. Clearly we are providing a valuable service to everyone who lives and works at Tinker AFB. Since we provide a service rather than produce a specific product, we are considered a service organization. However, the fact that we are a service organization does not mean that we think of ourselves as a service organization. We often get so involved in our daily activities that we forget about the fact that we exist to serve our customers throughout the base. Without them, we would be out of business."(7:1)

As Lieutenant Carter states, the impact of customer service on the Air Force mission is quite substantial and requires the cooperation of operational and support forces. It is important that part of this cooperation takes the form of a greater understanding of the needs and requirements of the customers. Misdirected efforts, no matter how well intentioned, serve no purpose. Properly directed efforts requires making a "customer first" commitment when providing a service (6:6).

Properly directed effort is the the first step toward organizational productivity and effectiveness. Certainly there are many factors which contribute to an organization's productivity. These factors include workforce ability, willingness, and opportunity. But no matter how well trained, equipped, and motivated the workforce, if a service organization does not understand its customer's needs and requirements, the majority of its efforts will be wasted.

Another important consideration is how top quality customer service greatly improves an organization's image and credibility. In 1985, Colonel Lawrence Klumas wrote the following in an Air War College research report entitled "The Base Civil Engineer: Managing for Excellence":

> "Customer service must be a believed and pervasive attitude. It must permeate the organization. This is the single most important characteristic establishing the value and esteem by which the BCE organization is held by its users. The personnel of Civil Engineering are perhaps the most visible service organization on the installation."(9:43)

During an interview published in the Winter 1983 Engineering and Services Quarterly, then Brigadier General Jud Ellis, who at that time, was the Deputy Chief of Staff, Engineering and Services, Tactical Air Command, stated:

> "I know our credibility depends almost entirely on our ability to make and keep commitments. We make commitments to ourselves - design schedules, planning schedules, RMP schedules, etc. We also make important commitments to our customers - they are our most important commitments. The internal commitments are important for proper organizational management; but, we are interfacing with 2,000 to 3,000 customers a month at each of our bases and don't know explicitly whether we are satisfying them. That was my most critical problem."(4:12)

Major General Jud Ellis is now the Deputy Chief of Staff, Engineering and Services, Headquarters United states Air Force.

Captain Jerry Haenisch found in his AFIT/GEM thesis entitled

"Attribution of Base Civil Engineering Leadership by Wing and Base Commanders" that inaction and non-responsiveness to command or customers was one of the most highly ranked BCE actions considered most damaging to good leadership (8:37).

Finally, Major Matsuda writes in the April 1986 TIG Brief:

> "It seems that the activities that always garner the organizational excellence awards are those that are not only well managed internally, but also those that make an attempt to stay open and serve the customers despite inconveniences."(5:13)

Instituting top quality customer service will foster benefits for all concerned. It can create an atmosphere of pride, innovation and accomplishment contributing to the Air Force mission and greatly improving organizational productivity, effectiveness, image and credibility.

CHAPTER TWO

CHARACTERISTICS OF QUALITY CUSTOMER SERVICE

To comprehend the various causes of poor customer service, it is useful to group customer service into three main categories and examine each from the perspective of causes of poor customer service and to then examine characteristics of good customer service. Customer service can be categorized into the service strategy, the service system, and the service people (1:40).

The Service Strategy

The service strategy is a plan of action which directs the attention of the people in the organization toward the real priorities of the customer (1:39). It is a plan of action which requires management's active involvement and emphasis. A well orchestrated service strategy leads into a culture which supports and rewards attention to customer needs. It is repleat with clear performance standards and sensitive and efficient feedback systems (1:102).

The most obvious cause of poor customer service in the area of service strategy is simply not having one. If there is no management emphasis or involvement, then service will simply revert to mediocre, at best (1:35). Customer service will be undefined, unfocused, unmeasured and unrewarded.

Undefined customer service is one in which the organization does not have a clear understanding of the true wants, needs and expectations of its customers (1:82). Typically, no method will exist for finding out what these expectations are. No customer surveys are designed or implemented, no specific training in customer listening skills is provided and regular visits to customers are not conducted. Conversely, most areas of the organization are off-limits for customers to visit. The organization often assumes it knows what the customer expects, but in reality, is only guessing. The results are often misdirected efforts (3:108).

If an organization does not know its reason for existence, it's efforts will be unfocused. This is characterized by people simply going through motions as though following a checklist with no clear objective in mind. This can especially affect a service organization if management has not made it clear the focus is the customer. And in fact, without customers, there would be no reason for the organization to exist.

If customer service is undefined and unfocused, then it also cannot be measured. To measure something requires a unit of measure and corresponding parameters of what is and is not acceptable. It makes no sense to measure something that has not been clearly defined. And even if it were measured, but was not what the customer really wanted, what difference would it make anyway?

If something is undefined, unfocused and unmeasured, it would certainly seem ill advised to attempt to reward behavior in relation to it. Typically, poor customer service is characterized by this lack of reward. No attention is paid to customer support people, and those tiny acts of meritorious service toward customers go unnoticed (3:108).

On the other hand, an organization that has a good service strategy knows what the customer really wants, really does what the customer wants, and when making a commitment, keeps that commitment.

Defining the service strategy requires a clear understanding of the wants, needs and expectations of the customer (1:82). Management theorist Peter Drucker suggests that one of the most important things an organization can do is to determine exactly what business it is in. This problem is often most pronounced in a service organization. The goal of a service organization may often not be clear because no tangible product comes rolling off an assembly line (1:63). It only makes sense then, when developing a service strategy, time spent actually finding out what the customers truly want will get the ball rolling in the right direction.

Assuming the members of the organization know what the customers truly want, the next step is to actually deliver it. This requires a strategy that by nature is extroverted. The organization is conceptually focused on the customer's needs. The focus is away from preoccupation with individual tasks, routine managerial duties, and administrative forms and reports. The prevailing attitude is to deliver the desired services to its customers (1:22). Additionally, if a promise is made to a customer, that commitment is kept at whatever expense (1:14).

In summary, a good service strategy is one that's defined, focused, measured, and rewarded. The strategy is defined by the customer through such things as questionaires, surveys, and meetings between management and the customers. The strategy is outwardly focused towards the customer's needs and desires. The degree of customer satisfaction is measured and success appropriately rewarded (3:108).

The Service System

The second major area of customer service is the service system. The service system can be characterized by a repeatable sequence of events in which various people try to meet the customers needs and expectations at each point. It begins at the very first point of contact between the customer and the organization and ends only temporarily when the customer considers the service complete and begins anew when he or she decides to come back for more (1:38).

However, an organization that insists its customers learn the organization to get needs met is demonstrating a sure sign that the service system is not customer oriented. Insisting that customers follow complicated procedures they don't understand or that they speak the organization's "language" may well indicate that the organization has become introverted. Under this system, it is easy for employees to get caught up in methods and procedures and lose sight of the effect this has on customers (1:95).

An organization repleat with nonsensical administrative procedures, illogical task assignments, regressive work rules and poor physical facilities all make it more difficult for the service people to provide service effectively. Sometimes there are forms that don't make sense and difficult to fill out. Other times, illogical or confusing building layouts or administrative processes burden the customer with tasks that could be handled by service employees. All of the above are sure signs of a customer service system that is not customer friendly (1:42).

An organization that has a good service system has one that is customer friendly. A customer friendly system is truly designed for the convenience of the customer rather than for the convenience of the organization. The physical facilities, policies, procedures, methods and communication processes all say to the customer, "We are here to help you" (1:39). Things are easy for the customer in favor of easy for the server. The layout of the facility is focused on customer ease of access. Ample parking is available. Things are easy to find. The guesswork is taken away. Immediate attention is paid to the customer without a lengthy wait in line. There are minimum procedures and forms for the customer to fill out. In short, the customer is made to feel welcome.

The Service People

The third major area of customer service is the service people.

This is not limited to the people who work in the customer service section, but encompasses all people who come into contact with customers. Obviously, if customer service is important, then it is necessary to have properly trained and motivated people on the front lines.

Generally, problems on the front lines can occur if these people only know one microscopic function and cannot offer a bit of help with any other. What happens in so many of these situations is that nobody "owns" the responsibility for the solution to the customer's problem and nobody sees the difference between carrying out job tasks and meeting customer's needs (1:45).

Problems on the front lines can also occur if the frontline people attempt to please their boss instead of the customer. Perhaps these people desire the accolades and incentives which may or may not be forthcoming from their bosses. Unfortunately, this tends to make them blind to the needs of the customer (1:85).

There are some people who are naturally introverted. These people may have difficulty interfacing directly with customers. If the nature of the work requires constant customer interface, the situation can become intolerable for the worker. Sometimes this situation can be traced to a low level of maturity or social skills (1:100).

If there is not a consistently high level of concern about and attention to the needs of the customers, the organization may suffer. If service people are unfriendly, unhelpful, uncooperative or uninterested in the customer's needs, the customer tends to project that same attitude on the organization as a whole (1:98).

An organization with good customer service will have people who are customer oriented, have a good understanding of the entire organization, are proficient and well trained in the technical aspects of their job, and posses a reasonably high level of maturity and social skills.

A worker possessing a reasonably high level of maturity and social skills will be able to be more attentive to the customers frame of mind and need. The ability to actively listen to a customer and respond accurately to a customer's need will be greatly appreciated (1:100). The effective frontline person is able to maintain a focus of attention towards the customer by tuning in to the customer's current situation, frame of mind, and need. This person is able to be responsive, attentive and willing to help. This encourages the customer to feel the service is superior, and he or she is likely to want to tell others about it (1:39).

A worker who is knowledgeable and proficient at his or her primary duties will be able to perform efficiently and effectively. A worker who consistently demonstrates proficient job performance will be most impressive to the majority of customers and leave a favorable impression. It is also helpful for the frontline people to posses a comprehensive knowledge of the entire organization's workings. This makes it possible for the worker to help a customer when a problem comes up which is beyond the scope of his or her normal duties (1:52).

An Applied Example

The characteristics listed above are general in nature and can be applied to most any service organization. To demonstrate an example of how more specific information can be gathered about base civil engineering organizations, the author facilitated a fact finding session with a small group of Air Command and Staff College students. The information gathering technique used during the session is known as the nominal group technique. The nominal group technique is an advanced form of brainstorming and was developed by Andre Delbecq and Andrew Van de Ven in 1968. This group of eight students were all Air Force majors and each had a different and varied career background. They had been stationed at several different bases and their responses represent viewpoints of several different base civil engineering organizations.

The overhead question for the group was "In your opinion, what are the key characteristics of good quality base civil engineering customer service?" During the brainstorming portion of the session, thirty two specific items were listed. These items were then grouped by theme and voted on for the purpose of prioritizing these responses in rank order of importance. The author later grouped the themes into categories. The results of this nominal group technique indicate that these eight Air Force majors consider the following in rank order of importance:

rank	votes	theme	category
1	61	Expanded services. (eg. weekend coverage)	system
2	59	Responsiveness.	system
3	53	Method for customer feedback.	strategy

rank	votes	theme	category
4	52	Friendly, polite, knowledgeable, clean workers.	people
5	45	Efficiency.	system
6	44	Method for informing customers as to status of work.	system
7	37	Opportunity for customer involvement.	system
8	36	Good leadership and supervision.	people
9	30	Fewer hassles from base civil engineering.	strategy
10	12	Different organizational structure.	system

It must be noted here that although this information is more specific than was the earlier information presented in this chapter, it still is not specific enough to apply directly to a particular organization. Each base civil engineering organization is slightly different from the next and this information represents, at best, somewhat of a cross sectional viewpoint. In chapter three, specific steps will be presented for managers to evaluate and improve the present level of service quality in any given base civil engineering organization.

CHAPTER THREE

A METHOD FOR EVALUATING AND IMPROVING CUSTOMER SERVICE IN BASE CIVIL ENGINEERING

This chapter presents a five step plan for evaluating and improving customer service in base civil engineering. The five steps provide a method for managers to develop a clear service strategy, educate customer-orientated frontline people, and design a customer friendly system for delivering service. In step one, procedures are explained for conducting a service audit through the use of interviews and questionaires. Step two is an explanation of how management can develop and clarify a service strategy during an executive retreat. Step three is an explanation of educational goals for the organization and how to attain them. Step four provides methodology for implementing the new tactics through front line worker participation and involvement. Step five provides methods for reinforcing the new orientation and making it permanent. The five step plan is designed primarily for base civil engineering managers, but the concepts are general enough to be applied to any Air Force organization.

Step One: Evaluate Present Service Quality

The first step for improving customer service in base civil engineering or any other organization for that matter is to evaluate the present level of service quality (1:170). Data must be collected and analyzed. There are many ways to collect data, but it will take the form of some sort of service audit. A successful service audit does two things. It establishes an intimate understanding of what customers really want and need from the organization. Secondly, it measures how well the organization is providing those things its customers really want.

Conducting a service audit is actually a two part operation. It starts with customer interviews to get an overall feel for what customers really expect from the organization. The information gathered from these interviews helps with the second part of the service audit, designing a questionaire which accurately measures how well the organization is delivering its services. Industrial Engineers are normally well grounded in the proper procedures of data collection and analysis. Therefore, in a typical base civil engineering organization, the Industrial Engineer is usually the best choice to conduct such a service audit.

Before conducting interviews, it's a good idea to start by assessing all known points of contact between the organization and the customer. One method for doing this is to think of all the potential ways customers come into contact with the organization when either requesting service, receiving service, or attempting to find out about the status of a service request. This may sound simplistic, but it serves as a starting point and sets the tone for determining a valid set of questions for the interviews.

Once the known points of contact have been assessed, it's easy to take the next step and identify who these customers are and conduct some interviews with them. Interviews should be conducted using open ended questions which allow the customer the freedom to speak about what is on his or her mind. Some sample open ended questions are provided in Appendix A.

Using open ended questions provides data that can be confusing to analyze because each interviewee will answer open ended questions in a different way. The idea here is not to pinpoint specific service quality criteria just yet, but to get a feel for it. When conducting the interviews, it's important to write down what each interviewee says. Then, later all of the responses can be compared at the same time. When comparing responses, it's helpful to look for ideas or themes that repeat themselves numerous times. These ideas or themes represent potential service quality criteria. These themes can then be converted into more specific questions and incorporated into written questionaires.

For a questionaire to be valid, it is necessary to ask customers questions which address their true needs and desires. For example, if a questionaire was loaded with questions about responsiveness, much would be learned about customer's feelings concerning responsiveness. But what if these customers were really unhappy about the appearance or attitudes of the workers? A poorly designed questionaire would completely miss this important service quality problem. On the other hand, a properly designed questionaire asks questions which allow customers to express how they truly feel about your service quality. It is for this reason the interviews and follow-up analysis are so important. They help the Industrial Engineer focus the questionaire questions on the customer's true needs, expectations and desires. After thorough analysis of interview results, questions can be formulated and designed into a questionaire. These written questionaires can now be mailed out to a larger number of randomly selected customers and much more specific data collected and analyzed. An example questionaire is provided in Appendix B.

After a sufficient number of questionaires have been returned, it's time to analyze the results. The data should be compiled and organized for management analysis and discussion. Use the data to further clarify customer's true expectations. Identify both weak and strong areas. Determine if and how well customer's expectations are actually being met. This is the critical information that will be used for the next step, the development and clarification of a strategy to improve the weak areas and expand the strong areas.

Step Two: Develop and Clarify a Service Strategy

Now that customer's true expectations have been established, and the level of service quality evaluated in relation to those expectations, a strategy can be developed and clarified which will better focus the organization toward satisfying those expectations (1:171).

One of the best ways to develop and clarify a service strategy while involving the people who will be responsible for insuring implementation is to conduct an executive retreat. If an organization has had success conducting management review committee meetings during off-sites for the purpose of long range planning, it may be natural to use the same format for this purpose. However, it's best to conduct executive retreats at a site completely removed from the day-to-day operations. Furthermore, it's a good idea to completely turn over the day to day operations to the person who is second in command during the executive retreat. This allows managers freedom to concentrate on issues fully without interruption. The atmosphere should be comfortable and relaxed but focused on the task at hand.

The executive retreat should be attended by senior managers who will be responsible for implementation of the new service strategy. In a typical base civil engineering organization, this would be the responsibility of the Base Civil Engineer, the Deputy Base Civil Engineer and the branch chiefs. These are the key personnel who are best suited for developing and later overseeing the implementation of the strategy.

By involving these people in the development process, it's possible to establish a consensus and singularity of purpose. These managers will understand the rationale behind the development process. In addition, they will own the ideas and be far more willing to implement. This understanding and ownership idea will be used again later when the frontline people are asked to establish the more detailed procedures for implementation.

The Industrial Engineer should bring the results of the service audit and begin by briefing the results. The Base Civil Engineer can then explain that the purpose of the executive retreat is to develop and clarify a strategy which will improve both the weak and strong areas that were found during the service audit.

Hopefully, the Industrial Engineer has been trained in the areas of group dynamics, group problem solving, and creative thinking. If so, the Industrial Engineer is an excellent candidate to serve as the facilitator for the strategy development phase.

It's important the facilitator keeps the group focused on the problem. A good facilitator knows how to keep a group on track, focused on the problem and progressing toward a reasonable solution. A facilitator operates like a traffic cop of ideas. He or she knows how to draw ideas out of those individuals who are hesitant to volunteer information and how to tactfully tone down those who tend to dominate. He or she helps the group to concentrate on key facts, trends, questions and issues and away from battles of opinions.

Most good facilitators use large blank pieces of paper on flip charts for recording ideas. The facilitator positions the flip chart where all members can see it. This flip chart then becomes the center of attention and helps the facilitator control the dynamics of the group by focusing the group's attention toward ideas that have been recorded on the flip chart. Once a flip chart page has been filled with ideas, it should not be placed out of view, but torn off and posted somewhere on a wall where it can be seen by all the participants. The ideas on these completed pages serve as a spring board for further ideas.

After the brainstorming session has been completed, it is necessary to combine like ideas and establish a priority to them. The priority will be based on on such factors as ease and cost of implementation, long range versus short range, resources available versus not available, and critical benefit to the customers.

A useful technique for prioritizing ideas is a voting process of assigning point values to ideas on a sliding scale. For example, the most important idea might receive eight points, the second most important seven points and so forth. All participants would vote and the votes tabulated, posted, and analyzed for validity. The priority list of ideas can now be formulated into an action oriented plan which will be easy for the people in the organization to understand, relate to and put into action.

Now that the service strategy has been developed and clarified by the senior management, it is time to take the next step and spread the concepts to the remainder of the organization.

Step Three: Educate The Organization

Spreading the concepts of the newly formulated service strategy can be done as part of an overall educational program for your organization. There are four major educational goals which will help facilitate implementation of the newly formulated service strategy. These four are; (1) teaching the concepts of the service strategy, (2) improving the technical aspects of individual jobs above and beyond normal on the job training, (3) improving understanding of the inner workings of the entire organization and (4) providing personal enrichment training for front-line workers (1:176).

The first place to start is with the concepts of the service strategy. This should be briefed to as many people as possible and should be a synopsis of the findings of service audit and the results of the executive retreat. The purpose of these briefings is to let people know about the importance of customer service and the direction that management hopes the service strategy will take the organization.

The second thrust of an organization wide educational program should be concerning the technical aspects of individual jobs. In the vast majority of organizations, improvements can be made to the on the job training program. Classes can be conducted within specific shops and geared toward unique requirements at that base.

These classes can be taught by people from within the shops. For example, a civilian who has years of experience working on a certain system can be encouraged to share his or her expertise in a formal classroom setting. Another example might be an airman, who after studying the manufacturer's manual on the proper operation of a piece of equipment, conducts a briefing highlighting the important points of the brochure. Conducting classes in this manner encourages discussion, generates greater communication within the shop, increases understanding of the technical aspects of various jobs and produces a more efficient, safe and productive worker.

The third goal an educational program should include is to foster greater understanding of the inner workings of the entire organization. This can be done by having each section prepare a short briefing outlining its major duties and responsibilities. One person from each of these sections can be the designated briefer. One short briefing could be conducted during each commander's call.

Fostering a greater organization wide understanding of the inner workings of that organization accomplishes two things. First, it promotes better communication and coordination between sections when accomplishing work. Secondly, when a customer asks any worker something about his or her organization or needs help in an area unrelated to that worker's immediate responsibility, information is straightforward and easy to provide.

The fourth area that an educational program should cover is personal enrichment training. The theory behind providing personal enrichment training is that such training improves a person's human relations skills and self esteem. This in turn helps make them more efficient and productive (1:176).

Courses such as Basic Communication Skills, Constructive Conflict Resolution, Improved Service to the Public, Stress Management, Assertiveness Training and Creative Problem Solving can be obtained from several sources. One such source is The Communication Training Institute, which is a division of the Supervisory Development Center, Office of Personnel Management, PO Box 7230, Washington DC. 20044. This agency provides training either on an interagency basis or a single agency presentation on-site. In addition, specific training programs can be tailored to your organization. The Supervisory Development Center lists (202) 632-6047 as their phone number for more information.

It is also possible to contract private trainers through the Base Contracting Office for a very reasonable fee. Local trainers often have catalogues of their own describing courses offered. Local trainers are usually very responsive to your needs.

Educating the organization is not a one time shot but an ongoing process. The main thing is to get started. Once you have started the educational process, it's time to take the next step concerning service strategy implementation.

Step Four: Implement The New Tactics

Implementing the new strategy will require a good number of people to change the way they do business. This change may be an attitude change or a change in procedures. In any case, it will require people to do things differently.

Whenever people are asked to do things differently, there is an inherent resistance. This resistance to change can be difficult to overcome. Some managers feel that if they order someone to to do something differently, it will automatically happen. Unfortunately in most cases, this approach is ineffective. The person who has been ordered to change may do so temporarily, but unless the boss keeps constant pressure on this person, old habit patterns will resurface once the pressure has been relaxed. A much more long lasting and effective way to overcome resistance to change is to involve the worker in the change process. This means giving the worker some latitude in how the change takes place (2:80).

Once again, a skilled facilitator can be of tremendous value at a time like this. Often, a highly effective Industrial Engineering Branch has at least one and sometimes as many as two or three people who have had some experience facilitating in a group problem solving setting. If the organization has had some experience experimenting with quality circles, this would be a perfect spring board.

Quality circles are small groups of workers who are led by a supervisor or facilitator and meet on a regular basis for the purpose of identifying, analyzing, and solving work related problems. They normally have some training or at least can be effectively coached in problem solving techniques such as data gathering, brainstorming, cause and effect diagrams, and pareto analysis. A list of suggested group problem solving techniques is provided in Appendix C.

If your organization has never tried quality circles and there are no skilled facilitators in your organization, training is available. The Air Force Institute of Technology's School of Systems and Logistics located at Wright-Patterson Air Force Base, Ohio, has conducted quality circle facilitator training for years.

Some organizations have had very good success using quality circles and others not so good. One of the reasons for lack of success is uneven management attention due to normal military turnover. Another reason quality circles can go off track is because they lack a focus of attention (1:178).

In this situation, the focus of attention can be provided. The desired focus of attention is coming up with ways to implement the new service strategy. In fact, it may prove surprising to management, but these people may very well come up with ideas that are even superior to those developed during the executive retreat.

One of the basic philosophies behind quality circles is that the people closest to a problem know the most about it and are in the best position to do something about it. Using the quality circle approach provides these people an avenue to focus on these issues and make effective changes.

The overriding thought here is that management has established the broad guidelines and the workers are going to hammer out the details. The beauty of this approach is that it significantly overcomes one of the barriers of resistance to change. It benefits by giving the workers an involvement in how the change is going to come about. The focus of these quality circles can be formulated by referring to them as service circles (1:178).

Once the circles get started, the basic approach is to first identify obstacles which may hinder the implementation of the new service strategy. Typically, the facilitator would use brainstorming techniques to help the group identify these obstacles. Many obstacles will be identified. Some of them will be so simple to remove that the group can do so immediately. These are normally the type of things that people were not aware of or were simply overlooking. The group discussion simply created a needed awareness.

Other obstacles may be more difficult to remove. It may be necessary to group these obstacles in several ways. They can be grouped by degree of importance or by degree of difficulty. They may be grouped as short range or long range, simple to comprehend or require further analysis. They may be grouped by the fact that they may be solved by the group or require assistance from upper management.

Normally, it's a good idea to start with the simple and easy things to solve to establish a sense of success and accomplishment. However, the more difficult should not be forgotten. They probably will, however, require further analysis to determine what's causing them. Depending on the nature of the obstacle, it may be necessary to further analyze the problem with a cause and effect diagram, some data gathering or pareto analysis.

In any case, it's vitally important that the group stays involved with this activity through to completion. A sense of ownership must be established and maintained. If the sense of ownership is lost, along with it goes interest and your chances of successful implementation will suffer accordingly. If this sense of ownership is maintained and fostered, it will aid immeasurably in the next step, which is reinforcing the new orientation and making it permanent.

Step Five: Reward Changes

One of the best ways to reinforce a desired behavior is to reward it (2:68). In the military setting, monetary rewards are often cumbersome. A much simpler way and often as effective reward is honest and sincere recognition of a job well done (2:70).

This recognition should start with the service circles and continue on through implementation of the service strategy. It is extremely helpful to ask the members of the service circles to give periodic briefings to management concerning progress. Management should demonstrate sincere interest in the findings of the service circles and offer both assistance and praise whenever possible.

Once a service circle has identified obstacles, figured out ways to remove the obstacles and established methods to make improvements, it's time to establish specific goals and objectives. Consistent with the approach that has been taken, these specific goals and objectives should be established by these same front line workers. These goals and objectives should be formulated in such a way that they can be quantified and measured. It's best that the frontline workers develop ways to measure and analyze their own progress toward these goals. They can collect the data and figure out what's working and what's not working and why.

The fact that these goals and objectives are going to be quantified and measured should not come as a surprise to the groups nor should failure to meet these goals be used as a reason for punishment. They should instead be a source of information for providing positive recognition and other rewards.

Customer satisfaction should be continuously reevaluated. Follow up service audits should be conducted in much the same way the original one was conducted. The Industrial Engineer can accomplish this and provide a further non-biased and objective viewpoint concerning the organization's progress.

The results of these surveys can be posted and widely disseminated. If successful, the organization has reason to celebrate and take pride in its accomplishments. Pride fosters pride and success breeds success (2:58). These feelings of pride and success contribute greatly to reinforcing the new orientation and making it permanent.

Conclusion

Top quality customer service does not happen by accident. It requires management's attention and active involvement. The current situation must be analyzed from the customer's viewpoint. A plan must be developed, implemented, and reinforced. The steps that have been outlined in this chapter represent a method for evaluating an organization's current situation and developing a plan to improve. The emphasis is on involvement. The customers are involved by providing information on how well the organization is doing. Management is involved by developing an overall plan for improvement. The workers are involved by hammering out the details and implementing the plan. Management is further involved by reinforcing changes through assessing and rewarding progress.

It is the author's view that using an interactive method which involves customers, workers, and managers in the formulation and implementation of a top quality service plan will result in long lasting and positive changes. The author further believes that these positive changes in customer service will greatly improve an organization's effectiveness, image, and credibility.

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APPENDICES

Appendix A -- Example Customer Interview Questions

Appendix B -- Example Customer Service Questionaire

Appendix C -- Suggested Analytical Techniques for Small Group Facilitators

APPENDIX A

EXAMPLE CUSTOMER INTERVIEW QUESTIONS

Generally, open ended questions are those that enable an interviewee the opportunity to answer the questions with something other than a simple yes or no. The following are some examples of questions that could be used when conducting an interview with one or more customers. When conducting interviews, be sure to write down the customer's responses. After several interviews have been conducted, (10-15 should be sufficient) the responses can be compared. Themes can be extracted and used to design questionaires which accurately focus on customer's needs and expectations.

1. What do you feel is the most important service you receive from Base Civil Engineering?
2. What is the least important service you receive from Base Civil Engineering?
3. What service should we provide which we are currently not providing?
4. What service, which we are currently providing, should we not provide?
5. When requesting service from Base Civil Engineering, which procedures seem complicated to you?
6. When requesting service from Base Civil Engineering, is there anything that seems inconvenient to you?
7. What happens when you request something from a person in Base Civil Engineering whose job is not related to the problem?
8. What happens when you are told you will receive service on something by a given deadline?
9. How do you feel about the quality of our work?
10. If you could pinpoint an area where the quality of work or service could be improved, what would it be?

APPENDIX B

EXAMPLE CUSTOMER SERVICE QUESTIONAIRE

This sample questionaire is designed to measure existing quality of service. This questionaire uses a Likert scale ranging from one to five points for each question. Other possible ways to design a questionaire include wording questions to a scale which measures the degree of perceived problems or perhaps the degree of importance to a customer. This questionaire is general in nature. A more specific questionaire should be designed from the results of interviews with your organization's customers.

To: Base Civil Engineering Customers,

The following questionaire is designed to measure how well we are meeting your needs and expectations. Please complete the questionaire by circling the appropriate number. Point scales are as follows: (1) unsatisfactory (2) marginal (3) average (4) good (5) excellent

1. Are the procedures for requesting service from Base Civil Engineering;
    - a. convenient? 1 2 3 4 5
    - b. easy to understand? 1 2 3 4 5
2. Are the forms for requesting service simple? 1 2 3 4 5
3. Is telephone access to our customer service unit adequate? 1 2 3 4 5
4. When visiting base civil engineering facilities for the purpose of requesting service, does it seem the building is well laid out for ease of access? 1 2 3 4 5
5. Is customer parking adequate? 1 2 3 4 5
6. Do you consider base civil engineering workers to be;
    - a. courteous? 1 2 3 4 5
    - b. cooperative? 1 2 3 4 5
    - c. helpful? 1 2 3 4 5

d. knowledgeable? 1 2 3 4 5

e. skillful? 1 2 3 4 5

7. How do you feel about base civil engineering responsiveness concerning;

a. smaller routine jobs? 1 2 3 4 5

b. smaller emergency jobs? 1 2 3 4 5

c. large complicated jobs? 1 2 3 4 5

8. How do you feel about notification procedures when work is about to commence in your;

a. work area? 1 2 3 4 5

b. base housing? 1 2 3 4 5

c. dormitory? 1 2 3 4 5

9. How do you feel about follow up procedures after work has been completed? 1 2 3 4 5

10. How do you feel about our quality of workmanship? 1 2 3 4 5

APPENDIX C

SUGGESTED ANALYTICAL TECHNIQUES FOR SMALL GROUP FACILITATORS

The following list of analytical techniques can be used by a trained facilitator during the executive retreat and later by the service circles. There is no set pattern for using these techniques. The order is dictated by the nature and circumstances surrounding the problem. The techniques, however, are listed in the approximate order they are most commonly used.

1. Brainstorming: An intentionally uninhibited technique using group dynamics for generating the greatest possible number of solutions to a problem for later evaluation and development. The technique normally involves a group of three to ten members. The problem to be addressed is stated and understood by the group members. All suggested solutions are recorded. Each member of the group is given the same opportunity to express himself. All solutions, good or bad, are encouraged. A leader is present and is responsible for the conduct of the meeting to include keeping the group on the selected problem.

2. Nominal Group Technique: An advanced form of brainstorming where individual ideas are prioritized and the final outcome results in a group consensus. The technique was developed by Andre Delbecq and Andrew Van de Ven in 1968.

3. Cause and Effect Diagrams: A technique which uses lines and symbols to represent a meaningful relationship between an effect and its causes. The technique uses brainstorming to generate ideas about the causes of a problem. These causes usually fall into four main categories: Manpower, Machines, Methods, or Materials. The technique is useful for focusing on the main causes of a problem, thus clarifying the problem and generating potential solutions.

4. Sampling: A statistical method for estimating the characteristics of a population by examining only a fraction of the population. A valuable tool for gathering facts accurately, inexpensively, and in a timely manner. Two types of data are usually collected: historical data that has already been recorded and observed data coming from live observations.

5. Check Sheets: A simple yet effective method for collecting data through observations. Check sheets can be used for sampling or to investigate significant causes as determined by the cause and effect diagram. There are three types of check sheets: Recording, Location, and Check List.

6. Pareto Diagrams: A technique used to analyze problems by separating the "vital few from the trivial many." It focuses attention on problems in priority order, enhances vertical and horizontal communication, and can also be used for comparing data changes during different time periods.

7. Graphs: A communication tool used to present an area of interest in picture form. Graphs can be used to interpret, summarize, and communicate data found through sampling or check sheets. Graphs make possible the presentation of quantitative data in a simple, clear, and effective manner and facilitate comparison of values, trends, and relationships.

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